

ABSTRACT

A vacuum apparatus and method for detecting the presence of a workpiece on a machine employs a mount for holding a workpiece that has an internal passageway extending between a surface of the mount designed for contact with the workpiece and a surface of the mount designed to be free of contact with the workpiece. A vacuum pumping and sensing apparatus is connected to the end of this passageway at the external surface of the mount and this apparatus has a sensor that senses the pressure in the passageway in the mount. The apparatus and method also employ a control device connected to the vacuum pumping and sensing apparatus for stopping the operation of the machine when the sensor senses a pressure above a predetermined maximum pressure.

09879760-061201